

AMENDMENTS TO THE CLAIMS

1. (Original) A method of producing a microstructured optical fiber from a preform, said method including the steps of:

 creating zones of relatively high refractive index at predetermined locations in said preform, said zones substantially surrounded by material of relatively low refractive index to create an array of light guiding cores, and

 subsequently drawing said preform to create a length of said microstructured optical fiber.

2. (Original) The method as claimed in claim 1 wherein said light guiding cores are surrounded substantially by air.

3. (Previously Presented) The method as claimed in claim 1 wherein said light guiding cores have a generally non-circular cross-sectional shape.

4. (Previously Presented) The method as claimed in claim 1 wherein said preform is formed from optically suitable polymeric material.

5. (Previously Presented) The method as claimed in claim 1 wherein a plurality of holes is drilled into said preform at said predetermined locations.

6. (Previously Presented) The method as claimed in claim 1 wherein said preform is drawn to form said microstructured optical fiber in a two-stage drawing process.

7 (Original) A method of producing a microstructured optical fiber from a perform, said method including the steps of:

creating channels of relatively low refractive index at predetermined locations in said perform, said channels acting to define light guiding cores, and subsequently drawing said perform to create a length of said microstructured optical fiber.

8. (Original) The method as claimed in claim 7 wherein a plurality of holes is drilled into said perform at said predetermined locations to create said channels.

9. (Previously Presented) The method as claimed in claim 7 wherein said perform is drawn to form said microstructured optical fiber in a two-stage drawing process.

10. (Previously Presented) The method as claimed in claim 7 wherein said perform is monolithic

11. (Original) A micro-structured optical fibre, said optical fibre including a plurality of air channels, said air channels acting to define light guiding cores between said air channels.

12. (Original) A micro-structured optical fibre for imaging applications, said optical fibre including air channels which act as light guiding cores.